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Structural Change in the German Banking System?

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Abstract

This paper starts out by pointing out the challenges and weaknesses which the German banking systems faces according to the prevailing views among national and international observers. These challenges include a general problem of profitability and, possibly as its main reason, the strong role of public banks. These concerns raise the questions whether the facts support this assessment of a general profitability problem and whether there are reasons to expect a fundamental or structural transformation of the German banking system.

The paper contains four sections. The first one presents the evidence concerning the profitability problem in a comparative, international perspective. The second section presents information about the so-called three-pillar system of German banking. What might be surprising in this context is that the group of public banks is not only the largest segment of the German banking system, but that the primary savings banks also are its financially most successful part.

The German banking system is highly fragmented. This fact suggests to discuss past, present and possible future consolidations in the banking system in the third section. The authors provide evidence to the effect that within-group consolidation has been going on at a rapid pace in the public and the cooperative banking groups in recent years and that this development has not yet come to an end, while within-group consolidation among the large private banks, consolidation across group boundaries at a national level and cross-border or international consolidation has so far only happened at a limited scale, and do not appear to gain momentum in the near future.

In the last section, the authors develop their explanation for the fact that large-scale and cross border consolidation has so far not materialized to any great extent. Drawing on the concept of complementarity, they argue that it would be difficult to expect these kinds of mergers and acquisitions happening within a financial system which is itself surprisingly stable, or, as one cal also call it, resistant to change.

Keywords: Banking system, financial system, Germany

JEL Classification: G 32, G 34, G 38

1 Introduction

In its 2003 Financial Stability Assessment of the German banking system the IMF argues that "the system faces specific short-term vulnerabilities" and that "over a longer horizon reversing banks' chronic low and declining profitability is a major challenge". The IMF views the abolishment of state guarantees for public sector (universal) banks in 2005 and the introduction of Basel II as major catalysts of changes which may in the final analysis help to meet this challenge, possibly even leading to an end of the so-called three pillar system of German banking, and concludes that "authorities on all levels should facilitate the process of adapting the public sector banks to the evolving environment".

The objective of this paper is to answer the questions indicated in the title: Has there been structural change in the German banking system so far, and will there be (further) structural change in the near future? These questions can only be answered by taking into account the uniqueness of the German banking system and its dependence on the specific architecture of the German financial system, which may itself be likely to be stable or to change drastically. [1]

The issue of structural change in the German banking system is closely related to the problem of profitability, which may in turn be related to the strong role of public banks. Analyzing whether the observable decline of profitability is a general phenomenon in German banking or merely limited to specific groups of banks and what its causes may be presupposes an understanding of the specific features of the German banking system and its structure.

These considerations determine the structure of our paper. We start with a brief international comparison to highlight the peculiarities of banks and banking in Germany in section 2, and then, in section 3, take a look at key developments in the German banking sector and the three most important groups of banks over the past thirty years and analyze the current structure and performance of these three sub-sectors. In section 4, we discuss possible future developments with respect to a consolidation in the German banking industry. Here we first look at consolidation within each main banking group, then at a possible consolidation across group boundaries, where our focus is on the possibility of an intrusion of private sector banks into the savings bank system, and finally at consolidation on an international and European scale. The concluding section 5 places our views on likely developments in the banking sector into the larger context of financial sector development.

2 A brief international comparison

Figure 1 below provides a quick overview of how two major determinants of the profitability of European and US banks have developed between 1985 and 2001. As Figure 1a) shows, interest margins have shrunk in all seven countries. This decline is most probably due to the fact that competition within

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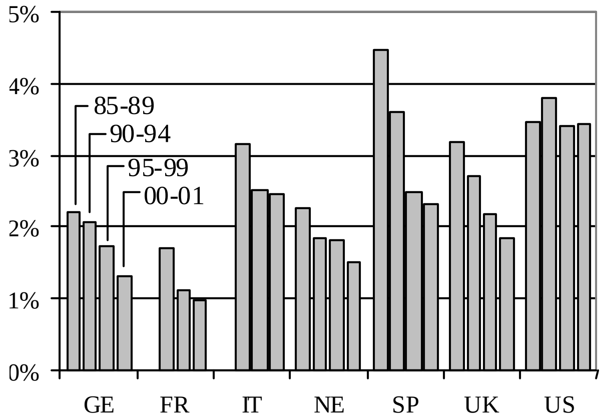
[1] See Krahnen/Schmidt (2004), especially Chapters 2 by Schmidt and Tyrell and 3 by Hackethal, for a detailed study of the German financial system and its peculiarities.

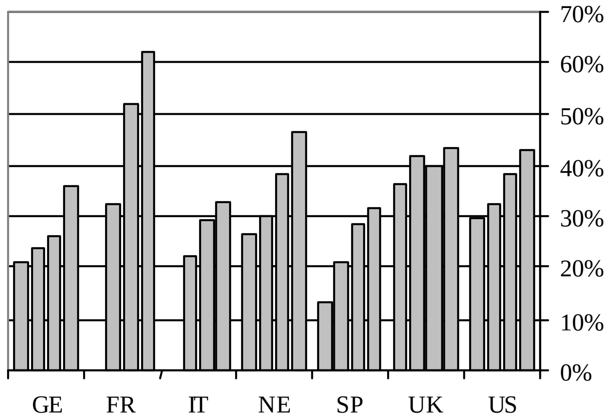
the banking industries - both nationally and internationally - and from non-bank financial intermediaries and capital markets has intensified over time.[2] At the beginning of this century only French interest margins were thinner than those in Germany.

Figure 1: Net interest margins and non-interest income contributions (1985-2001)

a) Net interest income / total assets



b) Non-interest income / total income



Note: Data for all banks in the case of GE (Germany), FR (France), IT (Italy), NE (Netherlands), SP (Spain) and for commercial banks only in the case of US and UK.
Source: OECD (1996, 2003)

Declining interest margins have caused banks in all countries to seek alternative sources of income. As a consequence, the relative importance of fee-based business like asset management, underwriting, advisory services and trading has risen in all countries, as Figure 1b) shows. This trend has been weak in Germany and the strongest in France, where interest margins were the lowest during the nineties. However, even in the US, where banks' interest margins have been above the international average during the entire observation period, the share of non-interest income in total income increased considerably.

These two closely related developments can be interpreted as evidence of a global shift in the focus of banks from traditional retail and commercial banking to more capital market-oriented services. However, this is not the only possible interpretation of the evidence. Although German banks have apparently started to catch up, they still seem to be far behind in this regard. In fact, in the German case the relative increase in the importance of non-interest income is on average almost entirely due to the erosion of interest margins. Non-interest income over total assets has only increased from 0.64% in 1991 to 0.70% in 2001.

That the poor performance of German banks is mainly an income problem can be supported by a look at their cost-income ratios. These have only risen above the average since the late nineties (see Figure 2a). Over the eighties and mid nineties they had been on par with those in many other countries. This suggests that German banks have not been primarily suffering from inefficient operations but rather from an

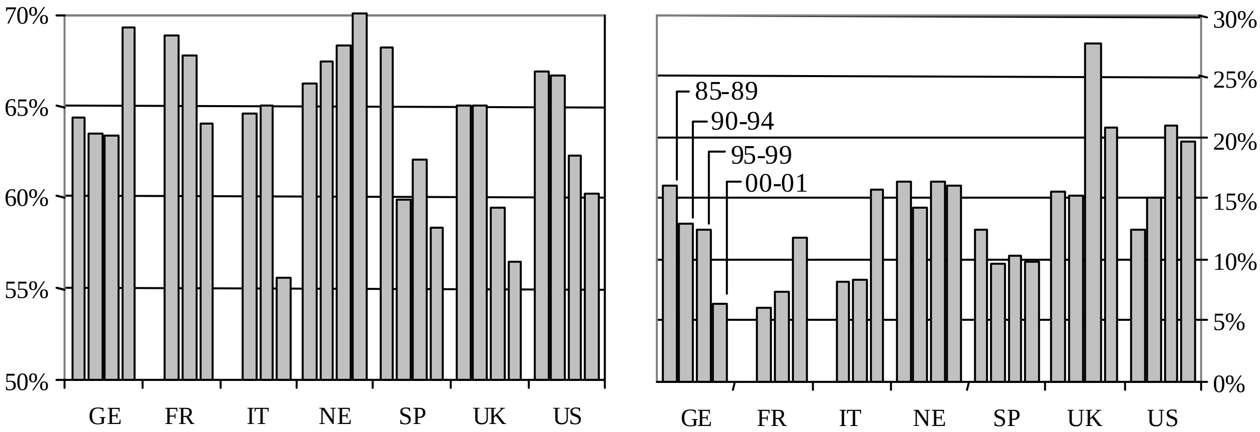
[2] Dermine (2003) shows that for many European countries this drop in net interest margins is primarily due to a squeeze in deposit margins, which in turn is also owed to lower general interest rate levels. Margins on consumer and corporate loans were found to have actually increased in many cases.

inability to generate sufficient income from their core businesses. The long-term development of total operating expenses over total assets of the entire German banking sector corroborates this view. According to OECD data, this ratio has declined steadily from 1.8% in 1985 to 1.4% in 2001. At that time it was lower than in any of the other six countries (France 1.6%, UK 1.8%, Netherlands and Spain 1.9%, Italy 2.0% and US 3.6%). This is surprising in view of the fact that Germany still has a very high branch density and is therefore often considered to be "overbranched".[3]

Successful efforts to reduce costs have however not been sufficient to compensate for the decline in revenue. As a consequence, pre-tax profits have continuously declined since the mid-eighties (see Figure 2b). Obviously, this trend was reinforced by events that occurred in the recent past. Pre-tax returns on equity for German banks came down to 7.9% in 2001 and declined further to 0.75% in 2003. On a post-tax basis the aggregate returns on equity of the German banking sector even turned negative in 2003. With an estimated average post-tax cost of equity of around 10%, the German banking industry has destroyed an enormous amount of economic value since 1990. The gap between post-tax income and the estimated post-tax capital charge could be as high as €33bn for the year 2003 alone. One can therefore hardly refrain from subscribing to the IMF's view on the specific vulnerabilities of the German banking system.

Figure 2: Return on equity and cost/income ratios (1985-2001)

a) Operating expenses / gross income b) Pre-tax profit / equity



Source: OECD (1996, 2003); for notes see Figure 1.

In the statement quoted above, the IMF implicitly identifies the culprits: poor credit risk management over the past years and market distortions through government subsidized public banks. Is this consistent with the evidence?

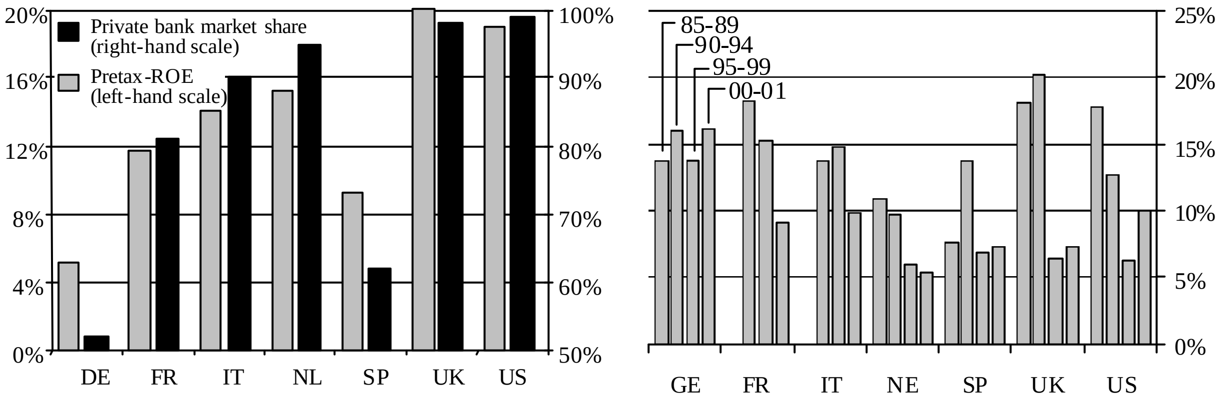
Figure 3b shows loan loss provisions over gross income for Italian, Spanish, French und US banks and total net provisions over gross income for German, British and Dutch banks. Although the different definitions of provisions in combination with general differences in accounting standards require great

[3] In 2001 there were roughly 1,500 inhabitants per German bank outlet. This compares to roughly 4,000 in the UK, 3,000 in the US, 2,900 in the Netherlands, 2,300 in France, 2,000 in Italy and 1,000 in Spain.

care in comparing the figures across countries, we are inclined to take the clear emerging results as general evidence corroborating the IMF's assessment of the German situation: whereas provisions have declined in most other countries over the past years they have remained high in Germany. Given that interest margins have also declined more in Germany than in other countries over the same period, one can safely assume that German banks have on average not priced credit risk appropriately.

Figure 3: Profitability, ownership and loan loss provisions

a) Profitability and bank ownership (2001)   b) Provisions/gross income (1985-2001)



Source: OECD (1996, 2003) and own calculations; for notes see Figure 1.

The discussion on the advantages and caveats of a strong role of state-owned German banks has been going on for many years with the Association of German Savings banks (DSGV) on the one side and the Association of German Banks (BdB) on the other side as the most prominent opponents. The DSGV argues that the current system with its large number of banks and its plurality of business models ensures high systemic stability, a high level of competition and comprehensive and cost-efficient access to banking services for all individuals and also for small and medium sized enterprises. The opponents to this view typically argue that public banks enjoy an undue competitive advantage through state guarantees. Moreover, public owners of public banks would not urge their banks to maximize risk-adjusted returns. This would further distort the competitive playing field as public banks would underprice credit risks, ride the yield curve and apply cross-subsidization to gain market shares in new business areas. These practices are said to have a negative impact on the income of the entire banking sector and to stifle innovation. Moreover, the fact that public banks cannot be acquired by private banks would impede further consolidation in the banking market which is commonly viewed as highly necessary to better exploit cost economies of scale inherent in the banking business and to foster the creation of national champions.[4] Critics moreover argue that competition would not suffer from a consolidation as the number of competing banks will still remain far above the number of domestic banks

[4] The combined market capitalization of the three largest German banks averaged €48bn for the years 2002 and 2003. This is the lowest value among the seven countries analyzed in this section (US €347bn, UK €179bn, Netherlands €84bn, Spain €80bn, France €72bn and Italy €53bn).

to be observed in other European countries. Rather, breaking up the regional principle that precludes savings banks from doing business with customers from other regions (see section 3.3 below), would even increase the level of bank competition in Germany. Finally it is argued that the financing of projects with high public but low private returns would not suffer from the privatization of savings banks as this financing role could be adequately performed by the existing national and regional development banks such as the KfW banking group. In summary, the advocates of structural change suggest that the strong role of public universal banks is actually destabilizing rather than stabilizing the German banking system.

The scarce available empirical evidence favouring one view over the other is mixed. For example, the comparison of the profitability of banking sectors from different countries with the domestic market shares of private institutions in Figure 3a) above shows a high positive correlation. Of course, this correlation may be pure coincidence or due to omitted additional factors. Such factors could be the governance model or the business orientation of a group of banks. Supporting evidence for the view that a certain lack of profit orientation, a high extent of decentralization and a focus on small business lending may be a recipe for success can be seen in the past performance of the German co-operative banking group (see section 3.4 below). Although the banks in this group are not backed by public entities, their average performance has been largely in line with that of the public savings banks over the past thirty years.

3 The structure of the German banking market

3.1 Banking groups – an overview

The German banking system is a universal banking system. For a very long time, banks have been permitted to engage in all lines of banking businesses, and the few existing specialized or non-universal banks have not emerged as a result of attempts to circumvent restrictive conduct regulation as in many other countries. Figure 4 below shows that out of the roughly 2,500 German monetary financial institutions that existed at the end of 2003, 2,255 were universal banks and 211 were specialised institutions, including 144 entities that should actually not be classified as banks but rather as non-bank financial institutions (e.g. investment companies).[5]

60% of all German banks belong to the co-operative banking sector and 22% to the savings bank group. Hence, more than 80% of all German banks are not strictly profit maximizing entities. However, because average asset size was just €0.41bn for primary co-operative banks and €2.05bn for primary

[5] The German Banking Act defines banks very broadly. Monetary financial institutions (banks) comprise (1) credit institutions, which conduct any of the following: deposit business, lending business, discount business, principal broking services, safe custody business, investment fund business, guarantee business, giro business, underwriting business, prepaid card business, network money business; and (2) financial services institutions that engage in either investment broking, contract broking, portfolio management, own-account trading, non-EEA deposit broking, money transmission services or foreign currency dealing.

savings banks the combined share in total domestic assets of these two groups was 24% in December 2003. Adding the total domestic assets held by the public Landesbanks and by DekaBank (€1,346bn) and the two regional co-operative institutions (€187bn) yields a total asset share of these non profit maximizing institutions of 48%.

Figure 4: German banking groups and number of banks and branches at year-end 2003

Category	Banks	Branches	Category	Banks	Branches
Universal banks	2,255 (495)	46,546	Special institutions	211 (22)	3,164
Commercial banks	357 (0)	5,461	Special banks	67 (22)	2,996
Big banks	4 (0)	2,225	Mortgage banks	25 (4)	101
Regional banks*	231 (0)	3,092	Building and loan associations	27 (11)	2,849
Branches of foreign banks	121 (0)	144	Banks with special functions	15 (7)	46
Postbank	1 (0)	10,646	Other monetary institutions	144 (0)	168
Credit co-operatives	1,396 (0)	14,609	Investment companies	77 (0)	98
Primary institutions	1,394 (0)	14,595	Housing enterprises with savings facilities	41 (0)	44
Regional central banks	2 (0)	14	Securities depositories and institutions only conducting guarantee business	26 (0)	26
Public banks	502 (495)	15,830			
Savings banks	489 (482)	15,246			
Landesbanks and DekaBank	13 (13)	584	**Grand Total**	**2,466 (517)**	**49,710**

Number of state owned institutions in parentheses.

Note: * Includes banks majority-owned by foreign financial and non-financial companies and private bankers.
Source: Deutsche Bundesbank (2004).

Because the combined domestic asset share of the four biggest private banks was only 16% in 2003 the German banking system is often called fragmented. However, as we will argue below, the savings bank group and the co-operative group might each be treated as a single large entity, bringing the market share of the top-5 banks very close to the European average of 56% in 2002 (ECB 2003).

3.2 Private commercial banks

The group of private commercial banks comprises two subgroups. One is that of the so-called big banks, and the other one is that of the regional and other private banks, including private bankers and foreign-owned banks. We first look at the internationally well-known big banks.

The first German joint-stock banks were established in the middle of the 19th century. At this time, private bankers were no longer able to satisfy the growing financing needs of mass-production industrial companies. A consolidation wave fuelled by the banking crisis of 1931/1932 led to the emergence of three dominant players, namely Deutsche Bank (founded in 1870), Commerzbank (1870) and Dresdner Bank (1872). After having been disbanded in the wake of World War II, all three reassembled between 1957 and 1958. Today, they still act as the housebanks to Germany's large industrial corporations (Elsas/Krahnen 2004) and form the core of Germany's private commercial banking group. The

Bayerische Hypo- und Vereinsbank (HVB), which resulted from a 1998-merger between two large Bavarian banks, joined the Deutsche Bundesbank category of big banks in 1999. Its retail business was traditionally located in the southern parts of Germany but has recently been expanded to the rest of Germany, Austria and Central and Eastern Europe.

All four big banks are truly universal banks in that their retail and corporate banking business is complemented by investment banking activities. Deutsche Bank, which acquired the British investment bank Morgan Grenfell in 1989 and the US institution Bankers Trust in 1997, and Dresdner Bank, which followed suit by acquiring Kleinwort Benson in 1995, have aggressively expanded their investment banking arms. In 1999, Deutsche ranked first, Dresdner second and Commerzbank fourth among large European banks in terms of the portion of total capital allocated to wholesale and investment banking.[6] Moreover, the big banks' fully- or majority-owned mortgage banks[7], their building and loan associations and their investment companies are among the largest in the German market. However, their current bancassurance strategies differ considerably. Whereas Deutsche Bank sold its insurance arm in 2001, Dresdner Bank was bought by Allianz, Germany's largest insurance group, in the same year. Commerzbank is co-operating with Generali, Italy's largest insurance group, and HVB with ERGO, Germany's second largest insurance group owned by Munich Re.

The subgroup of regional and other commercial banks comprises all German private second and third tier banks. The largest are Bankgesellschaft Berlin (rank 13 in 2003)[8], Postbank (rank 16), which is majority-owned by the privatized German postal service, ING BHF-Bank (rank 27), which was acquired by the Dutch ING Group in 1999 and partly sold to Sal. Oppenheim and Cie. in 2004, and ING DiBa (rank 31), a rapidly growing direct bank. Most other banks in this category focus on their respective regional or sector-related retail or wholesale market.

The group of private commercial banks also encompasses the so-called private bankers. They include the oldest banks in Germany such as Berenberg Bank (founded in 1590), B. Metzler Seel. Sohn & Co. (founded in 1674) and Sal. Oppenheim & Cie. (founded in 1789). Typically, they are controlled by owner-managers who are personally liable for the financial obligations of their banks. Their number declined, it went from 1,406 institutions in 1925 to 491 in 1938 to below 50 at the end of 2003. Today their share in total assets of German bank's domestic operations is below 1%.

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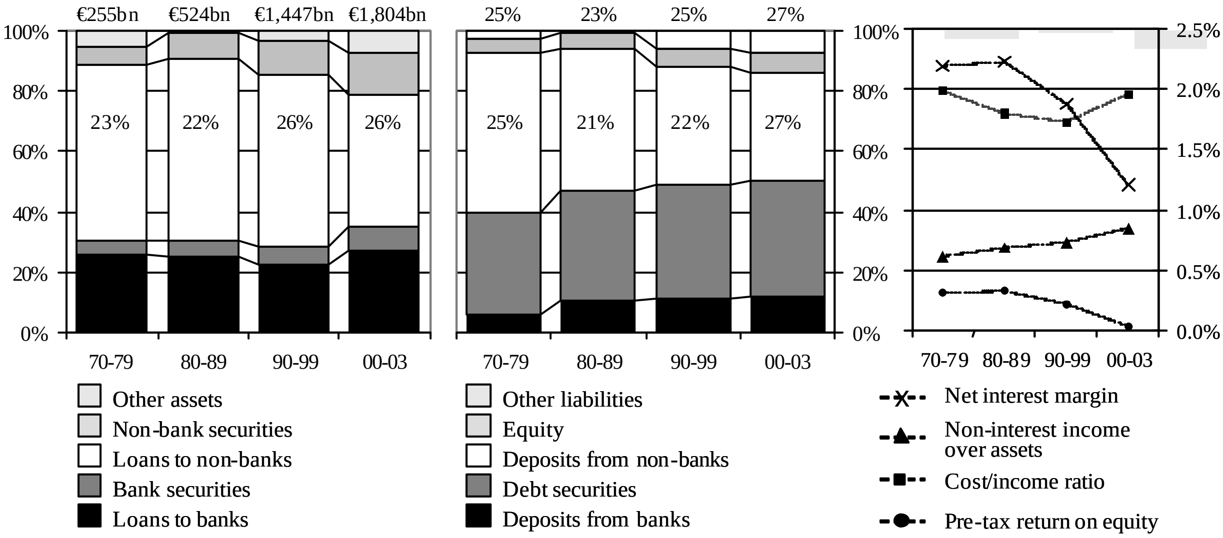
[6] In a joint study, Goldman Sachs and McKinsey estimate that German banks captured 23% of total revenues in the European corporate banking market in 1999. However, British banks were still far ahead with a combined market share of 39% (Leadem et al. 2001).

[7] In 2002, Commerzbank, Deutsche Bank and Dresdner Bank split off and merged substantial parts of their mortgage banking businesses into Eurohypo AG. In 2003, HVB split off it commercial mortgage banking activities into Hypo Real Estate Group, which is now operating independently from HVB.

[8] Bankgesellschaft Berlin, an exchange-listed holding company majority owned by the state of Berlin, was created from the merger of Landesbank Berlin and two commercial banks, Berliner Bank and Berlin Hyp, in 1994. It represents the only case to date in Germany of a cross-sector consolidation.

Foreign banks and non-banks controlled roughly 7% of German domestic banking assets in 2003 through 45 banks majority-owned by foreigners and through 84 German branches of foreign banks. Their market share has remained fairly stable over the last 20 years.

Figure 5: Balance sheet and income statement of commercial banks (1970-2003)



Note: Figures above columns in the left panel show total domestic assets of all banks in the group at the end of 1979, 1989, 1999 and 2003. Percentage values indicate 5-year average market shares regarding total assets, loans to non-banks and deposits from non-banks. In the right panel, the right-hand scale applies to interest margins, non-interest income over assets and cost/income ratios. Pre-tax returns are measured along the scale from 0% to 100% on the left.
Source: Deutsche Bundesbank (various monthly reports)

Figure 5 above depicts the aggregate balance sheet and four key performance indicators for German private commercial banks. Loans to non-banks as a fraction of total assets have declined from roughly 60% in the 70s, 80s and early 90s to 50% during the late 90s and have plummeted to 44% in 2003. The share of securities of non-banks held by banks has, however, increased from 7% in 1971 to more than 12% in 2003, indicating an increase in the importance of operations in close proximity to capital markets. The liability structure of commercial banks has changed even more dramatically than the asset structure. Although the banks in the group have managed to gain substantial market share over the recent past[9], the share of deposits from non-banks in total liabilities has dropped from over 52% in the 70s to 38% in 2003. Deposits from banks and bank debentures now account for more than 50% of total liabilities.

Due to the expansion of the four big banks into investment banking and due to the growing importance of the asset management business for most private banks, the ratio of non-interest income to total assets has increased steadily over the past years and reached an all-time-high of 1.0% in 2000 (0.8% in 2003). The interest margin, defined as net interest revenue over total assets, has steadily declined from over 2% over much of the seventies and eighties to around 1.2% in 2003. Partly because of the interest income

[9] The main reason for this gain is simply the inclusion of Postbank in this group after its privatisation in 1999.

squeeze, the cost-income ratio exceeded 75% in 1999-2003 after commercial banks had managed to keep it below 70% for most of the nineties. Regarding the bottom line, pre-tax returns on equity have dropped during recent years and reached an all-time-low of negative 5.7% in 2003.

3.3 The savings bank group

The savings bank group consists of two types of financial institutions: primary or local savings banks and regional banks. In addition, there is a system of savings banks associations.

The first German public savings bank was founded in Göttingen in 1801 after most existing private savings banks had suffered seriously from the Napoleonic wars. The Prussian savings bank act of 1838 ruled out the legal independence of all 234 Prussian savings banks of the time and placed them under the direct control of the respective local government. Other German states followed this example soon after. At the beginning of the 20th century there existed a total of about 2,700 public savings banks. A reverse regime change occurred in the wake of the great depression. In 1931 German savings banks were given autonomous legal status and were subjected to specific savings banks laws and government supervision in order to avoid an excessive indebtedness of local governments. At the same time, the so called guarantee obligation ("Gewährträgerhaftung") was introduced, which makes the public founding entity, which typically is a municipality or a county, liable without restriction in the event of a default of its savings bank. Thus the municipality or county as an "owner" serves as a guarantee vis-à-vis depositors and third party lenders. In addition, the founding entity also has to bear the so called maintenance obligation ("Anstaltslast"), which makes it responsible for ensuring that its savings bank is in a position to perform its legal functions and to meet its financial obligations at all times. Because the maintenance obligation by itself virtually rules out a default of the savings bank, the guarantee obligation has only been invoked in very few cases. Primarily owing to the constrained budgets of local governments and the avoidance of negative reputation effects, the maintenance obligation has also only been invoked very rarely. Instead of bailouts by their public owners, mergers with healthy banks from the public system have been used as the preferred way of resolving an imminent crisis.

Public savings banks are governed by the savings bank laws of the respective German states. These laws oblige the savings banks to serve the public interest of their region by fostering individual savings and the "thriftiness" of the general population and by satisfying the credit demand of their local communities. Savings banks should thereby focus on the needs of employees, small and medium-sized enterprises – which are commonly referred to as the German "Mittelstand" - and certain public authorities. As a part of their service mandate, savings banks are obliged to open a transaction account for every applicant. Typically, the laws further stipulate that profit maximization is not the only or even not the primary business objective of savings banks, although they have to conduct their businesses according to sound economic principles. They even need profits urgently to self-finance and increase their equity in accordance with a growing lending business since the municipalities as owners are rarely in a position to inject the necessary additional equity.

The laws also do not permit savings banks to hold shares in enterprises outside the savings bank group, trade money market, equity or foreign exchange instruments on their own account or take part in an underwriting consortium. Moreover, to avoid competition between local savings banks, each institution is prohibited from operating outside its local area, the so called regional principle. In rural areas they typically compete with co-operative banks and in metropolitan areas also with the branches of the private commercial banks.

Formally speaking, the governance structure of primary savings banks resembles that of private commercial banks. There is an executive board which reports to a supervisory board called "Verwaltungsrat". Two thirds of its members are appointed by the owner or the owners of the bank, one third is elected by the employees. A third body, the credit committee, consists of at least three members of the supervisory board and gives the founding entity the opportunity to exert a certain influence on important credit decisions.

In addition to the 482 public savings banks, there exist seven so-called free savings banks, which are essentially self-controlled and thus do not benefit from state guarantees but are otherwise more or less comparable to their public peers. One of them and at the same time the largest savings bank in Germany is the Hamburger Sparkasse (Haspa). In its annual report for the year 2000 (p. 3) Haspa acknowledged that it "[…] is unreservedly committed to the smaller businesses. The need to introduce an internal rating system (Basel II) will inevitably mean that lending terms will be tightened up to give more protection against lending risks. [However, t]he smaller businesses will still get loans on attractive terms." This statement is accompanied by the following: "The profits we earn are ploughed back into Haspa. This sound footing has enabled us to adapt successfully to social and economic change throughout our 174-year history and to become a leading all-round financial institution for the local economic region". This form of profit appropriation is indeed typical for savings banks. According to Sinn (1996) the ratio of retained earnings to net income has on average been 50% higher for savings banks than for private commercial banks in the period 1980 to 1994. One obvious reason for this peculiarity is that unlike their private competitors public banks cannot raise external equity from third parties. Yet critics often argue that the practice of founding entities to tolerate low pay-out ratios in addition to providing the two forms of guarantees mentioned above unduly insulates public banks from the pressure typically exerted by private shareholders and thereby constitutes a competitive advantage to the savings bank group as a whole and to the Landesbanks in particular. As a consequence, the group members would appear to be in a position to offer financial products to customers under favourable conditions which can hardly be matched by German and foreign private sector banks without squeezing margins to unattractive levels.

Landesbanks and regional savings banks associations constitute the second tier of the savings bank group. The twelve Landesbanks have three functions. Firstly, they serve as the housebank to their state(s) and as such provide cash management services and grant loans, which are mainly refinanced by means of public mortgage bonds ("Pfandbriefe") and public sector bonds. Secondly, they act as the central bank to the primary savings banks in their region and as such act as the clearing institution for inter-bank transfers and support the much smaller primary banks in providing complex, non-standard products and services to their customers. Moreover, they are truly universal banks in their own right providing commercial and investment banking services to larger domestic and foreign banks, non-banks and public clients. They thus compete directly with the large private commercial banks. It is essentially this latter role which is vigorously attacked by the group of private banks as being unfair and incompatible with the various forms of public subsidies which Landesbanks have received in the past. The European Commission has determined that public support for the universal banking function is to fade out starting in 2005.

The ownership structure of Landesbanks varies from case to case. It can include the respective states (“Länder”), other Landesbanks, primary savings banks of their region and regional savings banks associations. The main function of these regional associations is to provide administrative services to their members, the regional savings banks. They run data centres, develop new financial products, conduct marketing campaigns and economic and market research, and provide training, procurement and auditing services. As a link between savings banks and Landesbanks they coordinate the activities within the group.

DekaBank is the central bank to all Landesbanks and together with the German Savings Bank Association (DSGV), in which all savings banks hold a stake, constitutes the third tier. Both the Landesbanks and the DSGV own 50% of DekaBank. This institution fully controls the investment funds of the savings group, which had €131bn under management at the end of 2003 and had a 19% domestic market share in retail funds.

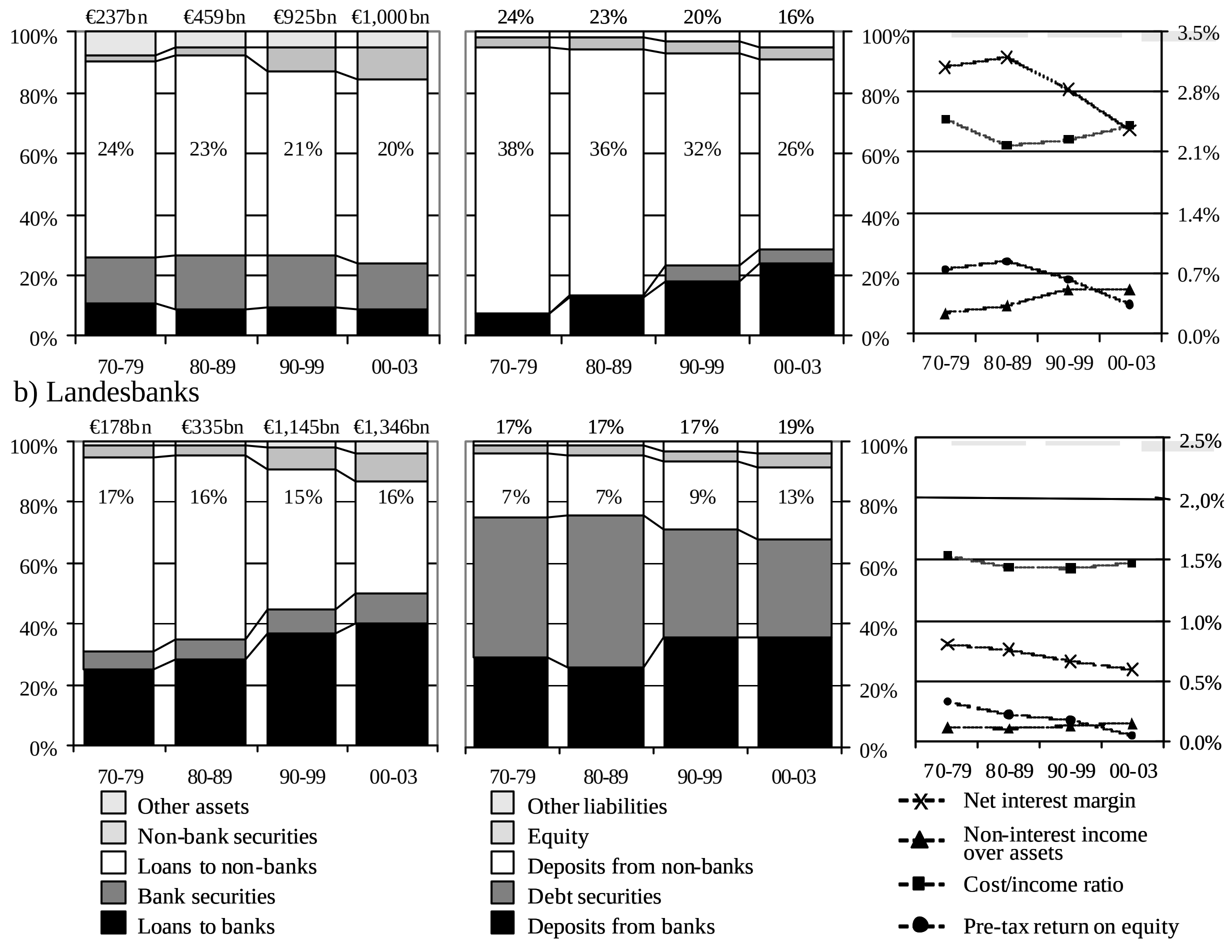
The savings bank group furthermore includes eleven regional public loan and building associations (market share in 2003: 35%), eight leasing companies (26%), two factoring companies (14%) and 14 public insurance companies.

Except for the high degree of independence on the part of the primary savings banks granted by the “federal corporatist” type of organization, the division of roles within the savings bank group resembles the hierarchical internal structure of the big four universal private sector banks with their headquarters, regional centres, branches and subsidiaries. Hence, the savings bank group could - and possibly even should - be perceived as one large bancassurance group. As such it constitutes the largest financial institution in the world with roughly €3,300bn in assets and 393,000 employees at the end of 2003.

Figure 6 below corresponds to Figure 5 and shows the (unconsolidated) balance sheet and performance indicators of the primary savings institutions and the Landesbanks for the past three decades. Because of their clear focus on traditional commercial banking, loans to non-banks represent the lion's share of the savings banks' domestic asset base. This share has decreased only slightly from 65% in the 70s to around 60% over the course of the 90s. Deposits from non-banks always were, and still are, also a specific strength of savings banks. In contrast to the asset share of loans, the share of these deposits in savings banks’ total liabilities has decreased considerably from 89% in 1970 to 64% in 2003. As a consequence, the traditional role of savings banks to be providers of funds to other banks has been eroded over time. As a group the savings banks have even become a net borrower in the interbank market.

This development is mirrored on the asset side of the Landesbanks. They now lend an increasing fraction of their funds to primary savings banks in the form of long-term money for the matched funding of mortgages. Traditionally, Landesbanks obtained these funds either by issuing bank debentures to private and institutional investors or through deposits from other banks. Although the combined market share of the savings bank group in total non-bank loans fell from 41% in the seventies to 36% in 2003, it is still over 42% for loans to small and medium-size enterprises (henceforth SMEs) and even over 66% for loans to the crafts sector.

Figure 6: Balance sheet and performance indicators of the savings bank group (1970-2003)



For notes and sources please refer to Figure 5.

The high interest margin of savings banks shown in the upper right panel of Figure 6 is due to their strong focus on retail banking services offered to households and SMEs and in particular to the economic rents from a fairly inert deposit base. Even though savers have become more price sensitive since the early nineties and thereby caused interest margins to drop significantly over the last two decades, the average interest margin of the savings banks is still twice as high as that of the private commercial banks with their stronger focus on the commercial banking business with larger clients. This advantage in generating higher net interest income explains why the cost-income ratio of the entire savings banks group is considerably below the average cost-income ratio of its private peers. Although savings banks' non-interest income over assets has more than tripled over the last thirty years (0.55% in 2003) it contributed only one fifth to total income in 2003. Therefore the erosion of interest margins has had a strong effect on the bottom-line of public banks. Pre-tax returns on equity of the savings banks as a group reached an all-time low of 7.7% in 2002, and those of the Landesbanks even turned negative in 2003.

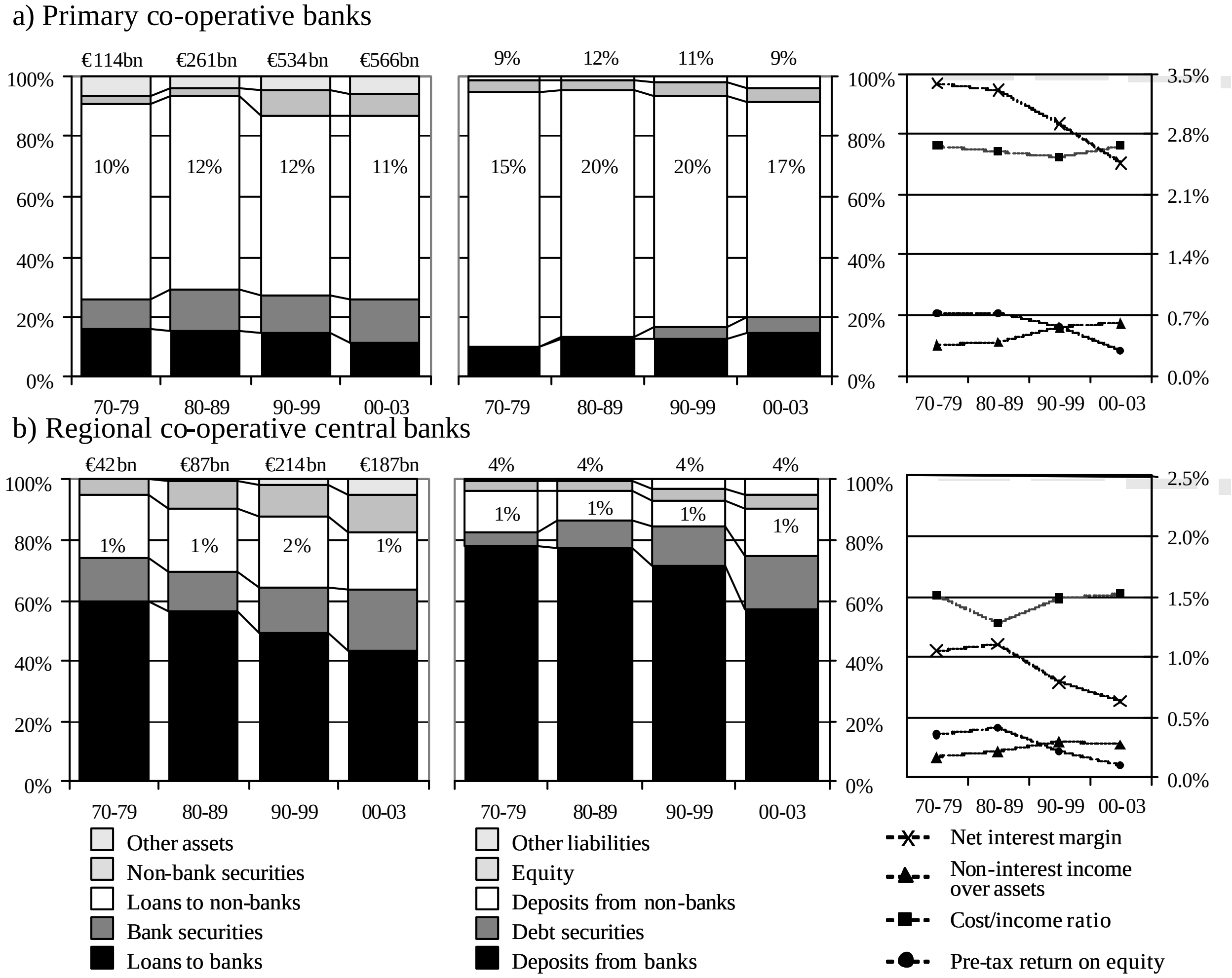
3.4 The co-operative banking group

In the early 19th century, German craftsmen and farmers suffered from dire financial constraints because the existing private bankers were largely focusing on trade finance and because the few private commercial banks were mainly granting loans to the manufacturing and transportation industry. Moreover, savings banks had to request collateral in exchange for credit. Starting in 1850, credit co-operatives were founded under the basic principles of self-aid, self-responsibility and autonomous administration to mitigate the effects of these constraints and formed the two different networks of Raiffeisen-Banken in rural and Volksbanken in urban environments. The savings of depositors were transferred to members with financing needs, and once a year the profit of a credit co-operative was distributed among its members. Nowadays, profits are still partly paid out to members – whose number reached more than 15 million in 2003, They can exercise their control rights according to the principle of one-person-one-vote at members' meetings and via a supervisory board. Only Since 1974 have non-member customers become eligible to receive loans. In 1972, all German credit co-operatives were united to form the German Federation of Volks- und Raiffeisenbanken, which shares many structural features with the German Association of Saving Banks.

The multi-tier structure comprises the primary credit co-operatives that provide mainly retail banking services to their local market. Like the Landesbanks, the two central institutions of the co-operative banking group - the WGZ Bank and the DZ-Bank - provide a wide array of services to their primary institutions. They act as clearing institutions, provide access to national and international financial markets, provide asset liability management support and offer centralized back-office functions. In addition, they compete with the private sector banks in the investment and commercial banking arenas.

The co-operative banking group also includes two mortgage banks, a leasing company, a building and loan association, an insurance company, a production specialist for consumer loans, and an investment company with approximately €77bn retail funds under management and a 18% market share at the end of 2003. The combined asset base of the group amounted to €811bn in 2003 making it slightly bigger than the Deutsche Bank Group. With its customer base of 30 million, it clearly exceeds Deutsche Bank's German customer base of around 8 million. Figure 7 presents financial data for the two parts of the co-operative banking group.

Figure 7: Balance sheet and performance indicators of credit co-operatives (1970-2003)



For notes and sources please refer to Figure 5.

The small size of the primary institutions brings with it the competitive advantages of customer proximity and quick decision making. However, in combination with the legal restriction that equity can only be raised from members and the economically unattractive feature that one member only has one vote irrespective of how much she or he invests, the small size in itself also curbs the loan business with larger enterprises and in effect precludes further profitable growth. The intense within-group M&A activity that has brought down the number of credit co-operatives from over 11,000 in 1970 to less than 1,400 at the end of 2003 can be partly explained as a reaction to this problem. Of course, in many cases the need to exploit economies of scale, to better diversify the loan portfolio or to rescue weak peer institutions have also played an important role.

With respect to balance sheet structure and performance indicators one can observe a striking resemblance between primary co-operative banks and primary savings banks. Whereas the share of loans to non-banks in total assets remained almost unchanged over the past, co-operatives have also suffered from liability-side disintermediation. Moreover, the continuous decline in interest margins combined with still low levels of non-interest income has also caused pre-tax returns on equity to fall well below 10% in recent years. Given the fact that co-operative banks do not benefit from state guarantees, one might conclude that the comparative advantage of both groups in terms of net interest margins over their private sector competitors is mainly due to established customer relationships in their small regional markets.

The balance sheet structure of the regional institutions of co-operative banks demonstrates their main role as central banks for the primary institutions. More than 60% of their assets and more than 70% of their liabilities are claims on other banks and funds owed to other banks, respectively. Over the course of the last 15 years they increasingly substituted bank loans and deposits by purchasing bank securities and issuing bearer bonds. Interest margins fell far below 1% and because of forays into investment banking activities, which did not turn out to be all too successful, fee and trading income rose to 0.35% of interest income in 2003.[10]

3.5 Summary and some implications

The preceding parts of this section offered an overview of the so-called "three pillar system" of German banks. This system has existed since the 19th century; it has even consolidated its structure since World War II and in contrast to developments in other European countries does not show a weakening of the role of banks which are not private and fully profit oriented. One of its surprising features is the very stability of the three pillar system.

The second feature is the prevalence of banks which are, by their legal and ownership status, not strictly profit oriented. Measured by total assets, market shares and geographical market coverage, the most important banking group is that of the public (universal) banks composed of savings banks and Landesbanks. Their status of being public banks has not been a handicap to the development of the primary savings banks. Political interference does not seem to be a relevant factor. But in contrast to the Landesbanks, the primary savings banks also do not seem to enjoy any specific benefit from having public entities as their owners.

All German banking groups have been affected by the decline of interest margins, though in different ways and to different degrees, and almost all seem to perform less well than their European counterparts in terms of profitability. This points to a common cause, which is not the cost structure but rather the income situation. It seems highly likely that this income problem is caused by the relatively high degree of competition in the German banking system which is in turn probably a consequence of the three pillar system: Although – or in fact even because – intra-group competition is restricted for primary savings and

[10] Instead of including a separate subsection on the heterogeneous group of special banks – in the sense of banks which are not universal banks – we refer the reader to consult the relevant section of Hackethal (2004).

co-operative banks by the regional principle which applies to these two groups, inter-group competition is fierce in German banking. This may be good for clients, but is not for the banks and their owners.[11]

It would be difficult to argue that the competition in local markets is “unfair” or even “unhealthy” simply because savings and co-operative banks are more successful than most other banks. That they are more successful may be due to the conservative or conventional business policies which they have not only chosen to pursue but which were also imposed on them by the restrictive regulation in the relevant laws and by their ownership and governance structures. They have been more reluctant to indulge in seemingly promising and in fact rather risk-prone activities related to cross border lending and capital market related business.[12]

It may be interesting to add at this point that this relative conservatism in the past ten years has anticipated a reorientation which slowly gains adherence in banking on a worldwide scale after the end of the stock market bubble in 2000 and 2001. In its recent Survey on International Banking published in April 2004, the Economist magazine claims that the trend of the future in banking is the return to – efficiently organized and implemented and client friendly - commercial and retail banking and to close bank-client relationships with customers who appreciate good service and cannot avoid banks by turning to capital markets for their financial needs. This is in fact what German primary savings and co-operative banks have continued to do. Having their respective associations and secondary financial institutions to provide other services to their clients and support the primary institutions may have helped the latter to pursue their traditional banking business in a relatively efficient manner; and the decentralized structure of the two banking groups may have allowed them to be more flexible and therefore also more responsive to client needs than large private banks.

At the same time, there is another aspect in which the three pillar system is likely to have an impact on competition and the income situation of the big private banks. Landesbanks do not only provide services to the primary banks in their own group and complement the array of services which these banks can offer to their clients. Together with the co-operative regional central banks, they are also outright competitors of the private commercial banks in the markets for investment and corporate banking services, and it is here that state guarantees and subsidies play an important role. This has allowed the big public institutions to underbid their private competitors in lines of business which are already very difficult because the clients can easily switch to capital market financing and to foreign competitors.

However, it would in our view go too far to claim that the “unfair” competition of the big public institutions is the main cause or even the only cause of the difficulties of many private banks. There are other reasons too, most notably the fact that these banks have in recent years shown little concern for a clientele which demands conventional banking services and which continues to play an important role in

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[11] See Fischer/Pfeil (2004) on the degree and the effects of competition in the German banking system.

[12] In so far, the German situation is similar to that in France where mutual banks have also benefited from not being allowed to incur risks from which private banks suffered greatly.

the German economy, the so-called “Mittelstand”. This neglect is a mistake which the big banks have only very recently understood and which at least Deutsche Bank and Commerzbank are now trying to correct with yet another round of strategic reorientation.

4 M&A or German banks as predator or prey?

4.1 The issues

An interesting way of looking at structural changes in a given banking system consists in regarding the banks or, as the case may be, the various groups of banks, as rivals which try to win over each other by either pushing the competitor out of the market or taking him over, not least motivated by the fear that they might themselves be eliminated in the same way. Simply outcompeting competitors in the banking business in such a way that they have to close down their operations is difficult in any event and even more difficult in view of the depositor protection issues which would be involved. Under the given circumstances in Germany, it is inconceivable for any of the three pillars of the German banking system to be simply annihilated and to be pushed to close down. Therefore, the issue to be discussed here reduces to the question of mergers and acquisitions. This way of looking at the German banking system motivates a great deal of speculation in the professional and the general press.

In this section, we adopt this perspective and explore its potential on the basis of what we have said so far. In a banking system like that of Germany, the perspective of consolidation through mergers and acquisitions seems all the more appropriate since there is the general feeling that Germany is “overbanked” and “overbranched”, i.e. that Germany has too many banking institutions which may be too small to be efficient and competitive both on a national and an international scale and that an oversupply of bank branches leads to local excess capacities for the provision of banking services.

This perspective may also be appropriate for the management of individual banks which has to consider whether it is wise to aspire the status of a predator trying to take over others or rather to be a prey and seek ways of being taken over at conditions which may be attractive for their owners and staff. Economic analysis suggests that institutional survival is not an end in itself. Private owners of banks might even regard being taken over as the best strategy. In a managerial perspective, one would instead rather regard the role of a predator as attractive and being taken over as failure.

This game of predator or prey has a national dimension referring to consolidation within the existing banking groups and to national consolidation across the limits of these groups, and an international dimension referring to possible cross-border consolidation. We address these different dimensions in turns, starting with the case of within-group consolidation.

4.2 Within-group consolidation

Taking the established banking groups in Germany as a starting point, we see a great deal of consolidation going on. It is most visible in the co-operative banking sector, concerning both the primary and the secondary institutions. As was already mentioned, the number of local co-operative banks has decreased dramatically over the last decades, bringing their number down from over 11,000 in 1970 to less than 1,400 in 2003. This trend is likely to continue in the years to come. Mergers or acquisitions are regularly used as a way of resolving problems at the level of individual institutions without a great deal of visibility and disruption of relationships with clients and staff. Moreover, traditionally many primary co-operative banks have been so small that consolidation opened up sizable opportunities to achieve economies of scale with respect to those functions which have been most affected by recent technological developments.

A similar process has been under way for many years at the level of the second and third-tier financial institutions of the co-operative system. Twenty years ago, there was still an elaborate three-tier system. This was not working well, as second tier and third tier institutions did not co-operate smoothly. Since the 1980s, the former DG-Bank, the once very strong third-tier institution, had taken over several second-tier institutions and at the same time started to be a really "big player" in international, corporate and investment banking. As it turned out, this strategy overextended its capabilities. DG-Bank got into heavy waters and in 2001 was de facto taken over by SGZ-Bank, one of the remaining second-tier institutions, leading to the creation of what is now DZ-Bank. There are now only two higher-tier institutions left, and it seems likely that DZ-Bank and WGZ-Bank will also soon find a way of amalgamating.

The situation in the savings bank group is not very different. There have been some 100 mergers between savings banks since 1980, reducing their number to 491 in 2003. Consolidation between Landesbanks is also underway. Larger Landesbanks such as Nord LB, West LB and Bayern LB have acquired substantial equity stakes in smaller peers such as Bremen LB, Saar LB and LB Rheinland-Pfalz. A third, and particularly innovative development refers to recent cases which may lead to some form of integration between a Landesbank and one or even several big savings banks. The main motives for consolidation in the savings bank group are the same as in the co-operative bank group. An important additional motive is the imminent fading out of state guarantees and the ensuing need to secure a good credit rating for the Landesbanks. A more far-reaching consolidation of the savings banks group is however not in sight.

It is important to add at this point that outright mergers and acquisitions are not the only form of consolidation in these two banking groups. Another one is the increasing co-operation between the different legally independent institutions in the form of outsourcing various and even important functions to individual institutions or to jointly held subsidiaries in order to achieve the aspired cost efficiencies. This outsourcing strategy has a long and successful tradition, as is evidenced by the existence of successful investment management institutions, insurance companies and building societies operating for each of the two groups. In the years to come, outsourcing may go much further than in the past and even include key functions of the banks' credit risk management. This development might ultimately transform the primary institutions to marketing and service outlets of giant multifunctional bancassurance conglomerates. If this materialised, it would indeed constitute a structural change worthy of this name.

Among private commercial banks, consolidation also advances rapidly. To date it mainly refers to secondary and even very small banks, which merge or are bought - and eventually also sold again - by other banks and notably the big banks. In some cases like that of Schmidt Bank, one of the relatively big regional banks in southeastern Germany, troubled private commercial banks are rescued in this way. And there is also considerable outsourcing going on, though this trend does not seem to go as far as in the other two groups.

However, what catches public attention and would have a great impact on the entire financial system is consolidation among the big banks. There are regularly rumours and initiatives. The most important case so far was that of the serious merger negotiations between Deutsche Bank and Dresdner Bank in 2000. This presumed "mergers of equals" finally fell through, not least because the two potential partners were in fact not equal. Dresdner Bank was later taken over by the insurance giant Allianz. Rumours about mergers and even serious discussions about possible mega-mergers involving Commerzbank and HVB surfaced again in 2003 when the profitability problems of the big banks were most acute. With the improvement of last year, this topic seems to have temporarily disappeared from the overt agenda.

Mergers and acquisitions between big private commercial banks are not easy to implement in any environment.[13] There are two reasons why they may be even more difficult in Germany. One is that the corporate governance system gives considerable power to the management of a joint stock corporation and correspondingly severely limits the influence of shareholders.[14] As a consequence, the management can be powerful enough to prevent its bank from merging or being taken over even though this may be in the interest of shareholders. The second reason is the tradition of big German banks of acting as the housebanks to their corporate clients and, more generally, of engaging in close bank-client relationships. The effectiveness of housebank relationships relies to a large extent on the identity of the bank. If Bank A takes over Bank B, it has to fear the loss of valuable client relationships which Bank B has had so far.[15]

We can conclude this section on intra-group consolidation by summarising that quite a lot has been going on and is still going on without however being as spectacular as a mega-merger between big banks. Those changes which occur tend to improve efficiency and strengthen each one of the three pillars and thus indirectly even solidify the three pillar system.

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[13] See Walter (2004) for an overview.

[14] See Rieckers/Spindler (2004) and Schmidt (2004) on corporate governance in Germany.

[15] Professor Manfred Pohl, an eminent bank historian working for Deutsche Bank, reported in a speech to a student group that for decades it has been the tacit understanding between the big German banks that Deutsche Bank would be the housebank of the largest enterprise in any industry in Germany, while the second in the respective industry would have either Dresdner Bank or Commerzbank as its housebank.

But the question remains: why has no mega-merger in the group of private banks occurred so far? All answers can only be tentative and are necessarily partial. An important factor may be that the potential to reach cost-related synergies is probably smaller than one might think. Economies of scale seem to be limited at the size level which the German big banks have already reached. In particular, the possibilities to cut down the costly branch networks are already there for the individual banks. Merging would hardly make this process easier. More importantly, the opportunities to solve the real problem, which is that of insufficient income, appear to be limited because even if, for instance, Commerzbank and HVB merged, it might slightly reduce the competition between the private banks, but it would hardly reduce the presumably high intensity of overall competition. Moreover, given the fact that the combined domestic market share of all four big banks is still below 10% for loans to non-banks and below 15% for deposits from non-banks, even two merged big banks would hardly achieve the scale and clout which would make them really competitive in any domestic market.

4.3. Consolidation involving different banking groups

There is only one question which deserves closer attention here: will private banks be able to break up the fortified camp of the public savings bank group and in particular to acquire primary savings banks? For the large private banks, the acquisition of a savings bank at a reasonable price would hold great promises. They are based on several factors which we have already outlined above. The most evident one is the retail market shares of the savings banks in their respective region. In many cases it is above fifty percent. Secondly, savings banks still have a large low-cost deposit base. Thirdly, staff costs tend to be lower in savings banks than in private commercial banks. Then they are more profitable than the commercial banks, which may not only be due to the above-mentioned factors but also, as we have argued in section 3 above, to their stable and rather conservative business strategies. As probably quite unbiased observers have stated not long ago, if one were to look for a candidate for the title of “Germany’s best bank” one would most likely find it among the good and large savings banks.[16] Finally, there is the fact that savings banks do not have “real owners”. The municipalities are only owners in a formal sense because their possibilities to take out profits are severely limited. This might make them inclined to even sell good savings banks in order to ease their budget problems, and to do so at a price which would be lower than that which real private owners would demand.[17]

But what speaks against the expectations that savings banks are sold to private bidders? First and foremost it is the legal situation which does not allow this to happen. Although laws can be changed if this should prove to be attractive, in the case of the savings banks it is not likely to happen soon. Not only

[16] See JP Morgan (1999), and in a similar spirit Krahnen (2004).

[17] There was recently a first highly contested case, namely that of the Sparkasse in Stralsund. The municipality wanted to sell it to a potential private bidder whom it would certainly have found in spite of the fact that this savings bank was not a strong one. The attempt was stopped at a political level.

the considerable lobbying power of the savings bank group, which is a consequence of its present legal and ownership situation, would stand in the way of the required legal changes. There are also at least three other arguments of a more economic nature which would at present largely speak in favour of maintaining the status quo.

The first argument is based on the economic role of the savings banks in general and especially for the local economy and for Germany's large and still largely local "Mittelstand". There are fears that new private owners would be willing to change the locally oriented, "Mittelstand"- and lending-focussed and traditionally conservative business policies of acquired institutions. Given the past relative performance of the savings banks as a group, such a reorientation might not appear very attractive, but, after all, several of the big private banks have in the last decade made moves which can be interpreted as attempts to get rid of exactly those clients to which the savings banks cater.[18] These tendencies seem to be over now, Commerzbank and Deutsche Bank seem to have rediscovered the merits of their "Mittelstand" clients, but they have left their mark. Moreover, during the past four years (2000 to 2003), the big banks have cut back their business lending considerably. This was perceived by some observers as exacerbating the cyclical downturn of the German economy. If the saving banks had not acted in a markedly different way during that time span by maintaining their lending volumes, Germany might have experienced an outright credit crunch. Their publicly perceived reluctance to lend may have cost the private commercial banks a great deal of their political credibility, and this could turn out to support the political front against a broad-based privatisation of savings banks. In view of the unusually high extent to which German non-financial enterprises depend on bank lending it is important – and also generally perceived as being important – that the banking system is a reliable financier of the economy.

There is now some rigorous relevant empirical evidence. In two research papers, we have developed and applied new methods of measuring the role of banks in the economy.[19] The earlier paper provides evidence of the high and stable intermediation ratios for German non-financial firms vis-à-vis German banks and thereby shows how important the banks are as financiers to the enterprise sector. As far as firm financing is concerned, there does not seem to be a tendency towards disintermediation in Germany, see Figure 8a). This finding stands in a clear contrast not only to the situation in several other comparable countries, but also to the views which seem to have inspired the strategic reorientation of Germany's big banks during the 1990s. The 2004 paper analyzes financial flows between sectors and shows the extent to which German corporations use external financing in the form of bank loans to fund their investments. Again in contrast to what has in the meantime become almost the accepted doctrine, the dependence of

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[18] Rightly or wrongly – since no outsider can know what bank strategists really intend to achieve - the experiment of creating Bank 24 as a specialised subsidiary of Deutsche Bank serving this bank's non-business and small business clients in a less sophisticated way than their established business clientele, comes to mind as the most obvious example. The outsourcing of sorts of Bank 24 and its clients met with considerable opposition among clients and the general public. In the meantime, Bank 24 has been reintegrated into Deutsche Bank.

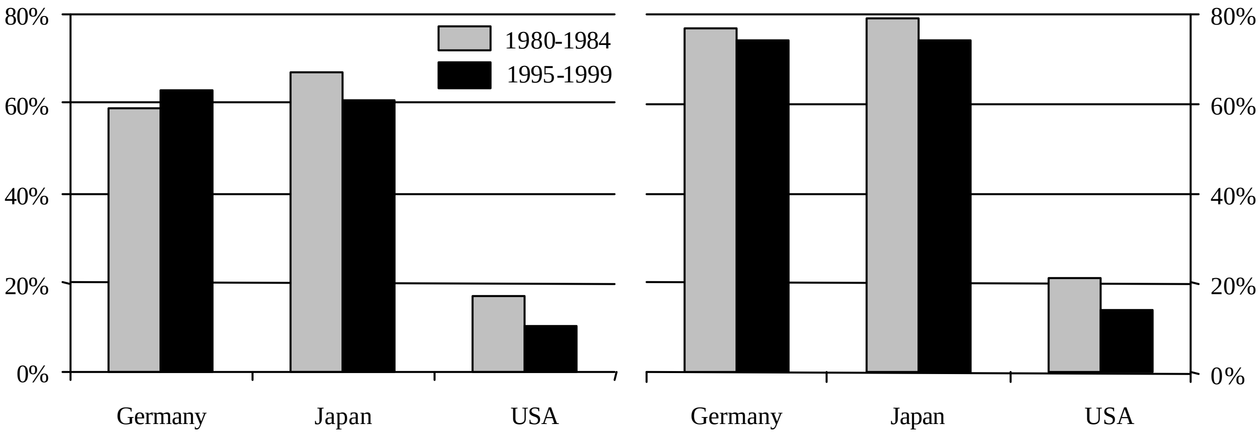
[19] See Schmidt et al. (1999) and Hackethal/Schmidt (2004). For summary versions in French see Schmidt et al. (1998) and Schmidt/Hackethal (2005).

firms on bank financing in Germany has always been high and also much higher than for instance in the United States, and is also stable over the 20 year period which we have studied. The main result is summarised in Figure 8b).[20]

Figure 8: Firm financing in Germany, Japan and the United States

a) Bank liabilities as a portion of total inter-sector liabilities and equity

b) New long-term bank loans as a portion of total long-term external financing flows



Note: Panel a) is based on an analysis of the national financial accounts of non financial firms from the three economies. National accounts are consolidated and hence do not include financial claims between domestic non-financial firms. Bank liabilities include bank loans, corporate bonds held by banks and corporate equity held by banks. Panel b) is based on an analysis of long-term financial gross flows into the three non-financial enterprise sectors. Again, only inter-sector flows are considered. Total long-term gross flows include new long-term bank loans, new long-term loans from non-bank financial intermediaries and the proceeds from the issuance of corporate securities such as bonds and equity.

Source: Hackethal (2001) for panel a) and Hackethal/Schmidt (2004) for panel b)

The second economic argument is that of competition in local retail markets. The level of competition is high in Germany, and as we said before, this may be a problem for banks but is good for their customers. It can hardly be questioned that the high level of inter-group competition is a consequence of the three pillar system and the role of the savings banks in this system.[21] In public debates in Germany about what would constitute and how one could achieve a more healthy banking system, England is frequently invoked as an example. The English banking system is now almost completely private and profit oriented, and it is highly concentrated. English banks are more profitable than German banks and in this respect also appear to be more stable. However, this is not because their costs are much lower but rather because their revenues are higher due to higher prices and margins, as one would expect for an oligopolistic market with a small number of largely similar competitors. Contrary to the situation in

[20] For methodological details and extensions see Hackethal (2000). It may be interesting to note that two central banks have in the meantime supported our view, see Bundesbank (2002) and on behalf of the ECB, Gaspard et al (2003). The Bundesbank paper is particularly interesting in so far as it uses a different methodology and different data and shows disaggregated results indicating that the dependence on banks loans is highest with smaller firms.

[21] See Fischer/Pfeil (2004) for details.

Germany, the access of small English firms to bank credit is also a problem.[22] Therefore it is questionable whether the English banking system can really serve as a positive example; and doubts based on these concerns may also stand in the way of a broad-based political support of a privatisation of savings banks via large-scale takeovers by, or mergers with, big private commercial banks.

The third argument is based on the economic effects which a well-functioning system composed of decentralised elements can have, and on the conditions which need to be fulfilled for such a system to function properly. In fact, so far the German savings bank system has been a system in the specific sense of being composed of complementary elements which mutually reinforce each other in their positive effects and mutually mitigate their negative effects.[23] It is characterised by a rather subtle distribution of roles and functions among group members. The so-called regional principle, which limits competition between primary savings banks, and the "subsidiarity principle", which restricts competition from the top level of the Landesbanks to the bottom level of the savings bank at least in principle though not always in practice, are equally crucial elements of this system as is the limited degree of profit orientation. We do not have the space to describe in any detail how such a system can be analysed and how the specific system of German public banks is constructed and functions.[24] But suffice it to state here that in their combination the elements of this system have a strong potential to create the incentives for co-operation between the institutions belonging to the group, which tends to enhance efficiency in the execution of certain functions, and at the same time to safeguard institutional independence, which is a prerequisite for flexibility and the responsiveness to client demands necessary for success in a highly contested market. The crucial question to which this leads is, of course, whether the way in which this system functions would be compatible with private banks becoming owners of parts of this system. The answer to this question is not clear, but it might well be that breaking any important building block out of this complex edifice makes the whole construction break down. This is such a high risk that it might prevent policy makers from taking action without the necessary knowledge.

Not surprisingly therefore, occasional attempts of the current government to encourage mergers in the German banking industry are to date mainly addressed to the private sector banks. However, the topic of consolidation across the boundaries of the established groups cannot be avoided. It has in fact been on the table for a long time now. This is due to the imminent removal of state guarantees and subsidies for public banks, a topic to which we now turn. .

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[22] For empirical support see the so-called Cruikshank Report on competition in British Banking from 2000. We do not believe that the implementation of the new capital requirements discussed as "Basel II" will severely constrain the access of small German firms to bank loans. One important reason for this is that in the course of time the relevant Basel II provisions have been watered down not least due to the influence of the German banking industry. Due to space constraints we will not discuss this issue in detail here.

[23] On complementarity in general see Milgrom/Roberts (1995), and Hackethal/Schmidt (2000) on complementarities in the financial sector.

[24] Moreover, this is work in progress, which will also include an analysis of the "secteur mutuel" in France.

German private sector banks have for many years argued that state guarantees have enabled public banks to have better credit ratings than they would merit on a stand-alone basis. As a consequence, Landesbanks and large savings banks would have benefited from lower refinancing costs which have unduly skewed the playing field in Germany. In July 2001, the European Commission decided that all forms of public guarantees are to be regarded as state aid under European Union law and are therefore illegal in principle. As a result of an agreement between the Commission and the relevant German authorities, the guarantee obligation must be abolished starting in 2005 and with a full effect in 2015, and the maintenance obligation must be adjusted in such a way that the financial relationship between the public owner and the public bank does not differ from a relationship under private law. There has been much speculation regarding the effect of such a ruling on the competitive position of the Landesbanks. Based on the assessment that the ratings of Landesbanks would be lower on a stand-alone basis than those of the big four commercial banks, some commentators expect an increase of the spreads of public bank debentures by 25-50 basis points[25]. Others argue that only about one fifth of these securities are not backed by pools of collateral so that the total effect on absolute refinancing cost is much smaller[26]. Because most funding of primary savings banks still comes from customer deposits that are fully secured by a deposit guarantee scheme independent of any state guarantees, the removal of state guarantees will probably not have a big impact on their business model.

The fading out of state guarantees and the need to pay back subsidies which the Länder governments have in the past given to their Landesbank is a serious challenge for the affected banks, and it has already started to spur consolidation within the group. But this may not be all. It can, over the medium term, have an important side effect on ownership and governance structures as it may serve as a catalyst for the privatization of savings banks. This would surely pave the way for a consolidation across banking groups, since teaming up with savings banks is the only way for private banks to quickly achieve greater scale in their retail business.

4.4. Cross-border consolidation

It would clearly constitute an important structural change of the German banking system if German banks made important inroads into other countries' banking systems and even more so if foreign banks extended their involvement in the German market or if truly international or pan-European banks with the participation of German banks were to emerge and appear on the German market. Therefore we conclude this section by taking a brief look at the European and international dimension of mergers and

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[25] See Donges et al. (2001), Sinn (1996) and Morgan Stanley (2000).

[26] See Menkhoff (1997). Moreover, the rating agency Moody's stated in a recent report from December 2004 that the high degree of co-operation and cohesion within the savings bank group justified a rating floor of A1 for senior unsecured debt of all member institutions. This would open up the possibility of assigning ratings at the double A level for the best Landesbanks. These institutions would then in fact enjoy a higher rating than HVB and Commerzbank.

acquisitions in banking. Of course, no-one can be sure that not from one day to the other a big foreign bank starts to acquire a German bank or vice-versa. However, on a grand scale this does not seem likely for various reasons.[27]

Currently the big German banks, which are the possible players in a game of intra-European mega-mergers, are in a too weak financial position to become active predators. After two or even three years with really poor financial results they simply lack the necessary funds, and their stock market valuations are such that they could hardly make attractive offers in a share deal. Moreover, most of them are still so heavily involved in internal restructuring efforts that they may not be inclined to face the additional challenge which a takeover battle and an ensuing merger would pose to their organisations. There are even tendencies of German banks, as well as those from other countries, to curtail their foreign involvement.

Looked at from the other side, the situation is largely similar. In view of their earnings situation, those big German banks which could be the targets of an attempted acquisition from abroad may not be all that attractive even though their market values are currently not high. This is due to their earnings situation and indirectly to the difficult competitive environment and ultimately to the three pillar system. The earnings prospects of an acquired German bank would most likely negatively affect the relevant ratios for a possible buyer from another country. Moreover, even the foreign acquisition of a big German bank or a merger between a German and a foreign big bank would hardly change the competitive environment in the German retail banking market.

There is an additional reason why we do not consider a mega cross-border merger as imminent. It is the fact that one important motive for consolidation at the national level does not apply in an international context. An important motive for mergers and acquisitions is the expectation of possible cost reductions or cost-related synergies. The obvious candidates for cost-cutting are the extensive branch networks. Cross-border consolidation would almost by definition not offer the opportunity to save costs by eliminating branches.

In an international comparison, the German banking system stands out as being quite unique. We have already mentioned many features of this uniqueness: the three pillar system, the large number of banks and the close bank-client relationships. An additional feature is the limited role of foreign banks. There has hardly been any foreign influx into the German retail market during the last decades. The combined market share in terms of total assets of subsidiaries of foreign banks and foreign-owned German banks has remained constant at around 7% since 1985. Moreover, according to a study of the European Central Bank from 2000, almost 90% of all 946 mergers and acquisitions in which German credit institutions had been involved between 1995 and 1999 were purely domestic in nature. A study commissioned by the Finance Ministries and the central banks of the Group of Ten (Group of Ten, 2001) reports a similar home

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[27] The following discussion does not apply to German or foreign second-tier banks, which may be actively involved in international transactions, and it leaves aside the special case of the efforts of HVB and its Austrian subsidiary Bank Austria to build up a network of banks in Central and Eastern Europe.

bias. The data reported in the study allow a distinction to be drawn between the origin of the target and the bidder bank. Between 1990 and 1999 the aggregated value of transactions in which a German bank was acquired by a foreign bank amounted to only 4% of the value of deals in which both target and bidder had been German banks. The study quotes experts as calling the fact that savings and co-operative banks cannot be acquired by non-group institutions as the main reason for the lack of cross-border M&A activity.

One possible reason for the small number of cross border mergers is highlighted in Hackethal (2001a). He compares the strategy profiles of more than 600 European commercial banks and finds substantial differences between banks from different countries. Based on two sets of variables that capture each bank's market position and its endowment with resources he first clusters the sample banks into nine strategic groups and then identifies those attributes that are best suited to discriminate between the banks in different strategic groups. He finds that one particular group is almost exclusively populated by German commercial banks. The average bank in that group stands out as one with a comparatively low return, a low return variance, a low equity ratio, a small role of non-interest income and a high asset growth rate. Most British banks were found to belong to a second group while most French, Spanish and Italian banks all fell into a third group. Given that banks from the same strategic group can be assumed to be fairly homogenous with respect to the strategies they tend to pursue but differ substantially in this respect from banks in other groups, and based on the observation that the country of origin is particularly important in explaining group membership, it can be conjectured that competition between similarly positioned domestic commercial banks is more intense than competition between banks from different countries. Moreover, it would be difficult to integrate two commercial banks from different countries or at least to coordinate the activities and amalgamate their structures. Both effects may explain why we have so far not seen a great deal of cross-border consolidation involving big German banks.

Moreover, Hackethal argues that path dependencies rooted in vast structural differences between European financial systems have caused second and third tier banks from different countries to react differently to identical changes in their business environment (e.g. regulatory harmonization and advances in technology) so that a convergence in terms of market-product combinations is not discernible. He concludes that these differences might at least partially explain the small number of instances in which (big) foreign banks entered the German market et vice-versa. This line of reasoning implies that intensified competition from other countries is only to be expected if structural changes in the German banking market occur, i.e. if the dominant position of savings and co-operative banks erodes.

These impediments to international and pan-European integration at the level of individual (big) banks are not likely to disappear any time soon. Therefore speculating who might be predator and who might end up as prey may not be fruitful in the German case. But as we said before, this is an area where one has by all means to expect surprises.

5 Conclusion

As we have argued in this paper, the big picture concerning structural change in the German banking system may be misleading. There is in fact not much change of its general structure, which comprises the tree-pillar system, the strong role of the not strictly profit-oriented banks from the public and co-operative sector and small market shares of so-called big banks. However, even this general architecture might soon change in a dramatic way if the walls between the three blocks should tumble. Moreover, underneath this seemingly calm surface, we see a great deal of change both within the three banking groups and at the level of individual institutions. How could one try to understand this seeming overall stability?

One explanation is that the lack of any really profound change points to a sclerosis, a deep-seated inability at all levels, including that of political decision making, to implement far-reaching reforms which may appear to be called for and which would also affect those features of the German banking system which one could call structural. Such fundamental or structural change typically occurs in unusual situations such as a great crisis or in situations where market participants have a very positive industry outlook. In the German banking industry both has happened in the not so distant past.

As recently as 2003, the situation of German banks in general and that of the big private banks in particular was very difficult. One could have classified this situation as a crisis and expected various changes as fundamental as those which had occurred around 1930. But they did not materialise. The crisis may not have been deep enough to force the relevant players to take measures which would have inevitably hurt entrenched interests seriously.

During the late 1990s, the inverse situation prevailed. At the peak of the new economy and the stock market rally, there were various indications of imminent and profound changes in the general structure of the German financial system which would most likely have brought along similar changes in the banking system. It was the time after the largest takeover battle of all times, that between Vodafone and Mannesmann, had dispelled the myth that hostile takeovers are inconceivable in Germany; Deutsche Bank and Dresdner Bank were seriously negotiating a merger, which would have completely upset the big banks' system; and the stock market had assumed an important role in enterprise financing which up to the late 1990s it had never had in Germany. As is well known, the stock market started to collapse after March 2000; there was no takeover wave; the mega-bank merger did not materialise, the new wave of IPO activity ended abruptly and the so-called Neue Markt closed in 2003.

These episodes lend credence to "the sclerosis view" according to which the observed stability is owed to the inability of the German economic and political system to undertake necessary reforms. Such a view would, however, presuppose that the kind of structural change which did not happen would really be called for and that the German banking system and, more generally, the entire German financial system were due to change because of inherent flaws which go far beyond strategic weaknesses at the level of individual banks and the normal need of institutions to adjust to changing circumstances. However, no one can be sure that this condition was or is fulfilled. We have tried to point out in this article that there were numerous measures taken almost everywhere in the German banking system which aimed at adjustment and modernisation, and there are many more which we did not have the space to describe. Examples are the joint effort of banks from all three groups to establish a platform for loan securitization, the successful promotion of online banking services and the bank-promoted surge in modern investment vehicles such as index certificates. One could hardly say that all these measures have generally failed to take their desired effects. That the almost-crisis of 2003 seems to have been largely overcome only by the end of 2004 is one of several indications that the system in its established structure may not be that bad after all.[28] We call this "the optimists' view".

More generally, one should ask whether the argument for a fundamental restructuring of the German banking and financial systems are as strong as some, including the IMF – see our introduction - tend to believe. If one looks at the strong role which German banks have always had and seem to still have for the German economy one might question this critical view. This raises the question of what is behind this view. We see an almost dogmatic conviction that state-owned and not strictly profit-oriented banks should not be an element of any modern banking system[29] and that, moreover, a bank-based financial system, which the German financial system has been for a long time and still seems to be[30], is in any event economically inferior to a capital market-based financial system along Anglo-Saxon lines.[31] Of course, state-owned and, more generally, not strictly profit-oriented banks would indeed not have a legitimate place in a capital market-based financial system.

Academic research on the merits of different financial system types fails to support these notions; and this applies equally to uncontested theoretical and empirical work.[32] Therefore it seems to be inappropriate to claim that any one specific type of financial system is generally more conducive to growth and welfare and, by way of implication, that state-owned banks ought to be eliminated in order to make a banking system and the financial system in which it is embedded more effective and more stable.

These considerations put our discussion of the German banking system into the larger context of financial systems and financial system development. One characteristic feature of financial systems is that they are composed of complementary elements.[33] Complementarity implies that it is essential for the functioning of any element of a financial system, such as the banking system, in what kind of a financial

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[28] For a comparison, one should look at the cases of Japan and France where the recovery of the respective banking systems from very difficult situations in the past two to three decades has taken much longer.

[29] See La Porta et al. (2002), who empirically analyze the effect of government bank ownership on financial development and economic growth. They find significant negative long-term effects and conclude that government ownership politicizes the resource allocation process and reduces efficiency.

[30] See Schmidt/Tyrell (2004).

[31] See for instance La Porta et al. (1997) and along more popular lines Rajan/Zingales (2003), who place the German financial system in the middle between the US system and those of "third world countries (where the situation) borders on the hopeless", p. 1. Rajan is currently the chief economist of the IMF.

[32] For relevant theoretical work see especially Allen/Gale (2000) and for empirical work Levine (2002).

[33] See the references provided in note 23 above.

system it is embedded. Another implication is that financial systems which are consistent and therefore exploit the welfare potential which complementarity offers, develop in a specific manner. They exhibit strong path dependencies, and as a consequence may not change gradually, since gradual change would produce at least temporary welfare losses. They rather tend to maintain their structure for a long time even under pressure until all of a sudden they undergo a dramatic and comprehensive change affecting all of its elements. Such a change would be a structural change of the kind which we can not – or not yet – observe in the German financial and banking systems. We call this “the complementarity view”

We conclude by summarising that the overall structure of the German banking system with its marked peculiarities appears to be stable and in fact even surprisingly stable. This may be due to three reasons. One is that the ability to implement needed changes is lacking in Germany – the sclerosis view. The stability may also be due to the fact that the need to implement structural changes is not given and that the German banking and financial systems are simply better than how they are regarded by many observers – the optimists’ view. Thirdly, the apparent stability of the structure of the German banking system or its resilience to change may be due to the fact that it is a core element of a so far largely consistent financial system which would not change easily and which has, for good or bad, so far maintained its character as a bank-based system. If this system breaks down, the banking system will inevitably also undergo far-reaching structural changes. We cannot rule out that this might happen soon. This is what the complementarity view suggests. Although we are inclined to believe that the first two views can partly explain the stability of some features of the banking system, we consider the complementarity view the most convincing of all three views.

References

Allen, F./Gale, D. (2000): Comparing Financial Systems, MIT Press

Cruickshank, D. (2000): Competition in UK Banking: A Report to the Chancellor of the Exchequer, London

Dermine, J. (2003): European Banking: Past, Present and Future, in: The Transformation of the European Financial System, edited by Gaspard, V./Hartmann, P./Sleijpen, O., European Central Bank, pp. 31-95

Deutsche Bundesbank (2004): The Performance of German Credit Institutions in 2003, Monthly Report Sept. 2004, pp. 15-41

Deutsche Bundesbank (2002): Zur Entwicklung der Bankkredite an den privaten Sektor, in: Monthly Report October 2002, pp. 31-47

Donges, J.B./Eekhoff, J./Mösche, W./Neumann, M./Sievert, O. (2001): Privatisierung von Landesbanken und Sparkassen, in: Schriftenreihe Frankfurter Institut Stiftung Marktwirtschaft und Politik, Vol. 38

DSGV (2001): Markets 2000 (condensed annual report) – Business Development, Trends, Analyses

ECB (2000): Mergers and Acquisitions Involving the EU Banking Industry – Facts and Implications, Dec. 2000

ECB (2003): Structural Analysis of the EU Banking Sector, Nov. 2003

Elsas, R./Krahnen, J.P. (2004): Universal Banks and Relationships with Firms, in: Krahnen/Schmidt (2004), pp. 197-232

Fischer, K.-H./Pfeil, C. (2004): Regulation and Competition in German Banking: an Assessment, in: Krahnen/Schmidt (2004), pp. 291-349

Gaspard, V./Hartmann, P./Sleijpen, O. (2003): Introduction, in: The transformation of the European Financial System, European Central Bank, pp. 7-29

Group of Ten (2001): Report on Consolidation in the Financial Sector, downloadable from www.bis.org

Hackethal, A. (2001): How Unique are US Banks? - The Role of Banks in Five Major Financial Systems, Jahrbücher für Nationalökonomie und Statistik, Vol. 221, pp. 592-619

Hackethal, A. (2001a): Strategic Groups in European Commercial Banking, GEABA Discussion Paper No. 01-19

Hackethal, A. (2004): German Banks and Banking Structure, in: The German Financial System, edited by Krahnen, J. P./Schmidt, R. H., Oxford University Press, pp. 71-105.

Hackethal, A./Schmidt, R.H. (2000): Komplementarität und Finanzsystem, in: Kredit & Kapital, Supplement 15, pp. 55-103.

Hackethal, A./Schmidt, R.H. (2004): Financing Patterns – Measurement Concepts and Empirical Results (revised version), Working Paper Series: Finance & Accounting, Goethe-Universität, Frankfurt a.M.

IMF (2003): Germany: Financial System Stability Assessment, IMF country report No. 03/343, November

JP Morgan (1999): German Banks – Sparkassen, Industry Update from Sept. 27.

Krahnen, J. P. (2004): Understanding the Surprising Strength of German Savings Banks, mimeo, Frankfurt/M.

Krahnen, J. P../Schmidt, R. H., eds. (2004): The German Financial System, Oxford University Press

Leadem, S.R./Chan, C.S./Enrico, C./Brinker, B./Heidegger, H./Orlopp, B. (2001): The Future of Corporate Banking in Europe, Joint Study by Goldman Sachs and McKinsey & Company, Jan. 2001

La Porta, R./Lopez-de-Silanes, F./Shleifer, A. (2002): Government Ownership of Banks, in: Journal of Finance, Vol. 57, pp. 265-301

La Porta, R./Lopez-de-Silanes, F./Shleifer, A. (1997): The Legal Determinants of External Finance, in: Journal of Finance, Vol. 52, pp. 1131-1150

Levine, R. (2002): Bank-Based or Market-Based Financial Systems: Which is Better? in: Journal of Financial Intermediation, Vol. 11, pp. 398-428

Menkhoff, L. (1997): Öffentliche Banken – nutzlos und teuer?, in: Ifo-Studien 43, pp.549-575

Milgrom, P./Robert, J. (1995): Complementarities and Fit: Strategy, Structure, and Organizational Chane in Manufacturing, in: Journal of Accounting and Economics, Vol. 19, pp. 179-208

Moody´s (2004): Assessing Germany's Public Sector Banks and Their Cross-Sector Support Mechanisms, Dec. 2004

Morgan Stanley (2000): German Banks, Jan. 19

OECD (1996): Bank Profitability, Financial Statements of Banks 1985-1994, Paris

OECD (2003): Bank Profitability, Financial Statements of Banks, 2002 Edition, Paris

Rajan, R.G./Zingales, L. (2003): Saving Capitalism from the Capitalists, Random House

Rieckers, O. / Spindler, G. (2004): Corporate Governance: Legal Aspects, in: Krahnen/Schmidt (2004), pp. 350-385

Schmidt, R.H. (2004): Corporate Governance in Germany: An Economic Perspective, in Krahnen/Schmidt (2004), pp. 386-424

Schmidt, R.H./Hackethal, A./Tyrell, M. (1998): Les banques perdent-elles de leur importance en Europe, in: Rapport Moral sur l´Argent dans le Monde, Association d´Economie Financière, pp. 377-386

Schmidt, R.H./Hackethal, A./Tyrell, M. (1999): Disintermediation and the Role of Banks in Europe: An International Comparison, in: Journal of Financial Intermediation, Vol. 8, pp. 36-67

Schmidt, R.H./Hackethal, A./Tyrell, M.(2002): The Convergence of Financial Systems in Europe, in: Schmalenbach Business Review, Special Issue 1/02, pp. 7-53

Schmidt, R.H./Hackethal, A. (2005): Différences internationales dans les structures de financement des entreprises, in: Prolegomènes d'une nouvelle économie bancaire, edited by H. Blommestein et al., Economica, forthcoming

Schmidt, R.H./ Tyrell, M. (2004): What constitutes a Financial System in General and the German Financial System in Particular?, in: The German Financial System, edited by Krahnen, J. P./Schmidt, R. H., Oxford University Press, pp. 19-67

Sinn, H.-W.(1996): Der Staat im Bankwesen – zur Rolle der Landesbanken in Deutschland, München

Walter, I. (2004): Mergers and Acquisitions in Banking and Finance: What Works, What fails, and Why, Oxford